# **Appendix K: Virginia's Wildlife Action Plan**

#### What is a Wildlife Action Plan?

Congress asked each state to develop a wildlife action plan, known technically as a comprehensive wildlife conservation strategy. These proactive plans examine the health of wildlife and prescribe actions to conserve wildlife and vital habitat before they become too rare and costly to protect. The Virginia Wildlife Action Plan is the Commonwealth's tool for keeping common species common and sustaining our rich and diverse wildlife resources.

### **Planning Approach**

Virginia's Wildlife Action Plan united its natural resource agencies and citizens through a common vision and concept for the conservation of the Commonwealth's wildlife and the habitats in which they live. It also provides a means for prioritizing actions and spending for the greatest return.

Led by personnel from the Virginia Department of Game and Inland Fisheries (VDGIF), the Virginia Wildlife Action Plan was developed with input from a wide array of public and private agencies and organizations. A steering committee composed of representatives of state and federal agencies, private conservation organizations, and land management entities provided guidance throughout the development of the plan. Technical committees comprised of more than 50 scientific experts from around Virginia provided input into the development of the list of species of greatest conservation need, the identification of the habitats that support them, the problems these resources face, and important conservation actions needed to address these threats.

An important component of the development of the Virginia Wildlife Action Plan was the participation of citizens from around the state. Efforts to involve Virginians included numerous presentations to groups throughout Virginia, news releases, periodic mailings, fact sheets, radio and newspaper interviews, and a dedicated project Web site. In fact, the Wildlife Action Plan project Web site was used as the primary tool for soliciting comments from the public. Twenty-two meetings were held across the Commonwealth, attended by nearly 200 individuals representing over 100 agencies and organizations and themselves. At these meetings, participants were asked to identify what, in their opinions, was working well in Virginia in wildlife conservation and what needed improvement in this area. They were also asked to identify and rank the top issues facing wildlife and habitats in their communities now and in the next decade, along with local solutions to address those problems.

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# Wildlife Highlights

The Action Plan identifies 925 species of greatest conservation need, representing a broad array of wildlife, and focuses on the habitats that support them, such as caves, high elevation forests, coastal marshes and barrier islands. A full 70 percent of the species on this list of greatest conservation need are invertebrates (insects, mussels, snails, crayfish, etc.), about which very little is known. Sixty percent of the species on the list are found in aquatic habitats. The species are grouped into four tiers of relative imperilment, based on the level and degree of immediate conservation action needed. The Clinch, Holston, and Powell watersheds in southwestern Virginia contain many of our most imperiled aquatic species.

Wildlife	Total number	Species of conservation concern*	Threatened/ endangered
Mussels	89	63	36
Snails	?	96	7
Crayfish	?	14	0
Insects	20,000+	290	9
Fish	210	97	20
Amphibians	74	32	4
Reptiles	61	28	8
Birds	374**	96	12
Mammals	85	24	10
Other Invertebrates	?	185	5
Totals	20,893++	925	111

<sup>\*</sup> Each state used its own criteria for this category. Virginia focused on species that demonstrated some level of rarity or risk of imperilment (e.g., subject to habitat loss, impacted by pollution, currently at low population levels, etc.). These species were further grouped into four tiers of relative imperilment, with the top tier including those of "critical conservation need" and the fourth tier including those of "moderate conservation need." The list does include some wildlife officially listed as threatened or endangered within the Commonwealth.

### The Primary Challenges for Conserving Wildlife in Virginia

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<sup>\*\*</sup> Includes breeding and most migratory birds.

Habitat destruction and fragmentation dominate the list of problems facing terrestrial wildlife in the Commonwealth. For Virginia's aquatic wildlife, the Action Plan identifies certain agricultural and forestry practices that have greatly affected water and habitat quality. Pollution and habitat changes from industry and municipal development are also critical issues for aquatic species.

Many grassland wildlife species are experiencing dramatic declines in populations because of the loss of grassland and savannah habitats across the Commonwealth. These important habitats are being converted to other agricultural crops (including cool season grasses), are lost as farms are converted for municipal uses, and are replaced by other habitats when farmlands are abandoned and allowed to mature into forested lands.

Habitat degradation in the rivers of southwestern Virginia resulting from certain mineral extraction and agricultural practices, and from the impoundment of these rivers downstream in Tennessee, has significantly impacted this biologically diverse "hot spot" in the United States. Over one-half of the freshwater mussel species found in this watershed are now listed as threatened or endangered. These species, which are important food sources for other wildlife and which serve as filterers in these rivers, are highly dependent on good water quality.

#### Recommended Actions to Conserve Virginia's Wildlife

Perhaps most importantly, the Action Plan identifies the actions needed to conserve these species on a regional basis. All of the conservation actions fit into one of eight categories: coordination, education and outreach, species management, habitat management, regulations/policy/law, land protection, enforcement, and planning. Effective conservation does not mean just managing the species and their habitats. Examples of conservation actions from the Virginia Wildlife Action Plan are shown in the table below.

Highlighted Habitats		Issue (examples)	Action (examples)
Barrier Islands	Piping plover (bird)		- Work with partners and local communities to provide greater outreach to beach users about the need to minimize
Ownership: mix of public/private		- Predation by introduced species	impacts.  - Remove introduced predators, particularly foxes and raccoons, on public and private lands as necessary to reduce impacts.

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Upper	Birdwing	- Sedimentation	- Provide incentives to private landowners
Tennessee	pearlymussel		to restore and maintain shoreline and
watershed	(freshwater	- Channel and	stream habitats
(Clinch, Powell,	mussel)	shoreline	
and Holston		alteration	- Protect vegetated stream buffers to limit
Rivers)	Wounded darter		sedimentation
	(fish)	- Organic	
Ownership: mix		pollutants	- Work with government agencies and
of public/private			industries on strategies to reduce
	hellbender		contaminant discharges.
	(amphibian)		
	Clinch River		
	crayfish		
	(crayfish)		
Grassland	Grasshopper	- Habitat	- Improve incentives to private
	sparrow (bird)	fragmentation	landowners to restore and maintain large
Ownership: mix		and degradation	patches of grassland habitats
of public/private	Upland		
	sandpiper (bird)	- Exotic species	- Restore warm season grasses and reduce
			the use of cool season grasses
	Eastern slender		
	glass lizard		
	(reptile)		

In addition to identifying actions that address problems facing wildlife, a number of key themes regarding conservation in Virginia recurred throughout the development meetings. These themes include:

- Better coordination with private landowners, public agencies, and all levels of government regarding critical conservation issues;
- Improved communication with and education of policy makers at all levels of government;
- Increased funding for and participation in conservation programs;
- Review and revision of existing regulations and standards;
- Establishment of dedicated permanent funding for conservation of all wildlife; and
- Encouragement of counties and municipalities to more comprehensively consider wildlife and habitats in planning and development

Many research and monitoring needs for the species of greatest conservation need were identified. In fact, for many species, one of the first conservation actions will be research to

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identify distribution, habitat needs, and threats. Future monitoring of the species and their habitats is necessary to measure our success during implementation.

### Implementation and Success of Virginia's Wildlife Action Plan

As throughout the development of the Action Plan, implementation of the recommendations involves a wide range of partners. This is a plan for all of Virginia, not just the VDGIF. Working groups are being organized to facilitate putting the recommendations into action.

The success of the implementation of the Action Plan will be monitored, and changes will be made as needed. The completion of the document certainly does not mark the end of the learning process. In many cases, it is only the beginning. While the work of conserving wildlife can be challenging, it is possible, as seen from the successful return of the bald eagle and the white-tailed deer, and this Action Plan provides the needed direction.

The entire Virginia Wildlife Action Plan may be found online at the VDGIF Web site (<a href="www.dgif.virginia.gov">www.dgif.virginia.gov</a>). For more information, a CD copy of the Action Plan, or for assistance integrating the Action Plan into other planning and conservation efforts, contact the VDGIF at 804.367.4335 or at <a href="wildlifePlan@dgif.virginia.gov">wildlifePlan@dgif.virginia.gov</a>.

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